

XXV **SOLDERING CONTROLS****SECTION I – Procedure:**

A 1. Identify the standard the supplier uses for performing soldering.

☐ MIL- STD 454      ☐ IPC-A-610      ☐ OTHER/

(IF Other, Specify:

- |   |  | Yes                      | No                       | N/A                      |
|---|--|--------------------------|--------------------------|--------------------------|
| A | 2a. Does a written detailed procedure exist and is it utilized for the soldering process? Identify procedure number and revision.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| A | 2b. Does a written detailed procedure exist for assembly of components prior to soldering? Identify procedure number and revision. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| A | 3. Are procedures readily available?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| A | 4. Are inspection procedures utilized for soldering? Identify procedure number and revision;                                       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| A | 5a. Are inspection and manufacturing personnel trained in use of procedures?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|   | 5b. Is this recorded and part of employee's file'?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| A | 6. Are soldering procedures written based on contract invoked requirements or generic and company based standards?                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| A | 7a. Is the procedure approved by the Customer? List Reference Approval Number, if applicable:                                      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|   | 7b. Does the procedure require review/approval by the government?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

		Sat	Unsat	N/A
A	8. Are procedures/work instructions adequate for control of:			
	a. (Proper Equipment) etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b. (Proper Materials) etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A	9. What type of tools, mechanical strippers, chemical strippers, thermal strippers, holding devices, bending tools, clinching tools are required in the use of the procedures?,. Specify sample of tools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A	10. Does procedure include system for identification of inspection status on parts and documentation? (e.g. inspection stamp)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**SECTION II – Record Review**

		Sat	Unsat	N/A
A	11. Identify inspection methods used to verify conformance with procedures and standards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A	12. What inspection documents exist and are they maintained to confirm inspection process was performed?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
	a. Are inspection documents properly completed and maintained?	<input type="checkbox"/>	<input type="checkbox"/>	
	b. Review and record number of samples: _____			
A	13. Is traceability maintained for material which has been soldered?	<input type="checkbox"/>	<input type="checkbox"/>	
A	14. Is inspection data reviewed and accepted by qualified personnel?:	<input type="checkbox"/>	<input type="checkbox"/>	

Yes No N/A

A 15. Are all tools, gages, meters, utilized for monitoring and/or inspection a part of the manufacturer's calibration program? ☐ ☐ ☐

A 16. Are certifications for raw materials used in soldering process reviewed for acceptance and maintained on file for review? ☐ ☐ ☐

A 17. Are adequate inspection work records maintained? ☐ ☐ ☐

18. Are shop traveler and work records traced to the operator/inspection personnel? ☐ ☐ ☐

### SECTION III – OBSERVATION OF SOLDERING PROCESS

Detailed observation of solderer (complete one section for each solderer observed). NOTE: if determined to be N/A, provide explanation.

Sat ☐ Unsat ☐

A 19. Identify process being observed. What is being soldered?

A a. Solderer identification: (name, badge or clock #, shift)

A b. Basic material(s) being soldered, pc board, wire, assembly, etc.

c. Identify soldering material, solder type, flux, class, etc.

A d. Is the solderer qualified for observed soldering procedure? ☐ ☐ ☐ Sat Unsat N/A

A e. Is the solderer familiar with details of the procedure? ☐ ☐ ☐

A f. Procedure number:

A g. Is it readily available to the solderer and inspector? Sat Unsat  
☐ ☐

A 20. Are their adequate methods of segregating accepted and rejected materials in use? ☐ ☐

A 21. Do solder rolls and raw materials have traceable markings on containers. What type of solders are used? (List) Sat Unsat N/A  
☐ ☐ ☐

A 22. Are soldering tools ions correct wattage for ESD or sensitive components. ☐ ☐ ☐

A 23. Are work areas clean from debris and separate from other areas for soldering operations. ☐ ☐

A 24. Are exhaust equipment utilized in soldering areas to provide fresh air for personnel. ☐ ☐

A 25. Do controls exist for handling and disposing of solder waste. ☐ ☐